Fusion3

F200 3D Printer

REPAIR:
FILAMENT MONITOR CABLE

Revision 2/20/2026

REPLACING THE FILAMENT MONITOR CABLE

If your filament monitor starts reporting false filament feed errors, the cable may need to be replaced.

BEFORE YOU BEGIN

Your printer should be off and cold.

Estimated repair time: 15 minutes.

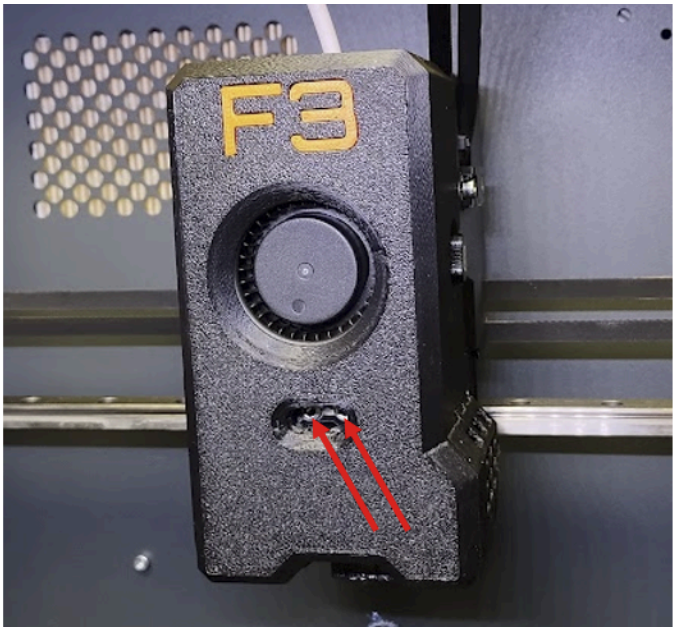
Tools required:

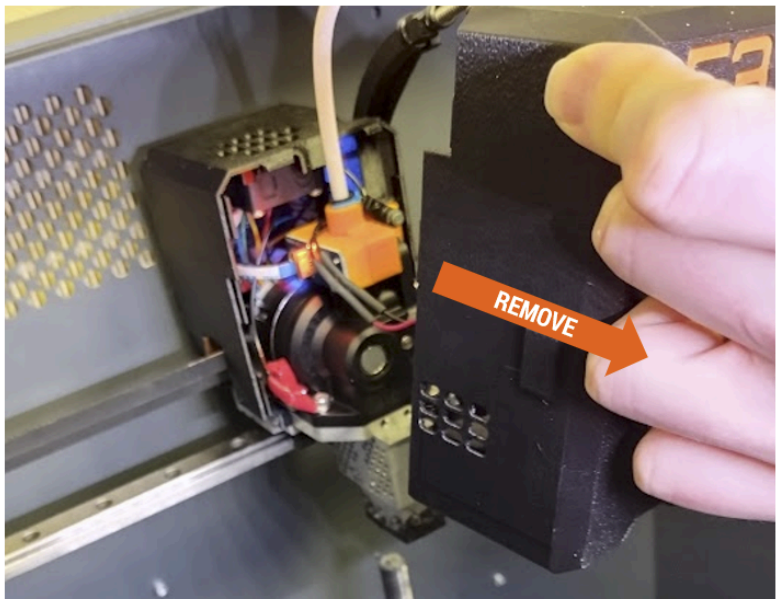
- 2.5mm hex drive
- 1.5mm hex drive
- Black stick or other gentle prying tool (NOT metal)

NOTE: Some of these pictures were taken on a pre-production printer and your printer will look slightly different.

REMOVAL

1. Remove the front toolhead by loosening the 2 captive M3 screws and gently sliding it off. The blower wires will prevent it from coming completely off; this is normal.



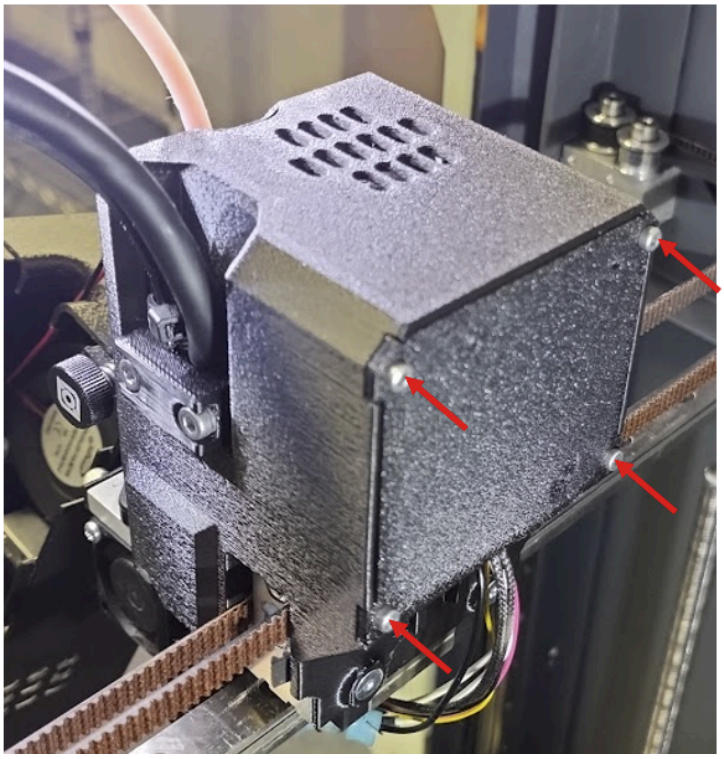


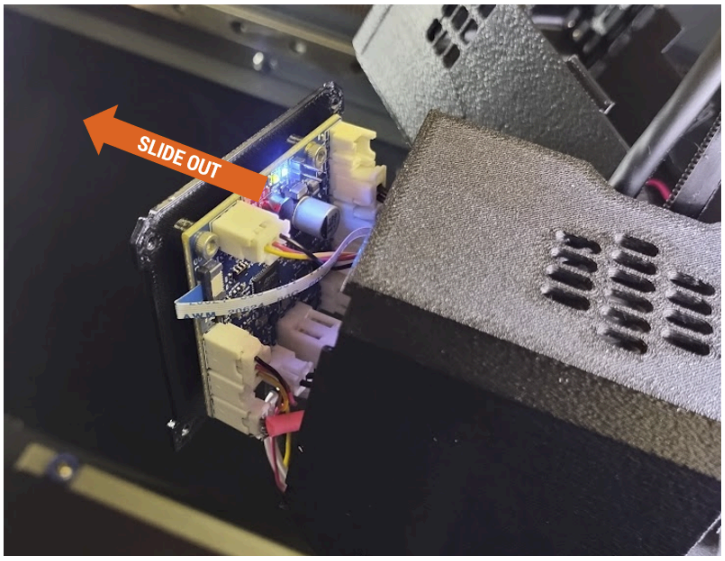
2. Use your black stick to pry up the ZIF connector on the filament monitor and slide the ribbon cable out. When the connector is fully disengaged the wire should come out with no resistance.

CLOSED CONNECTOR

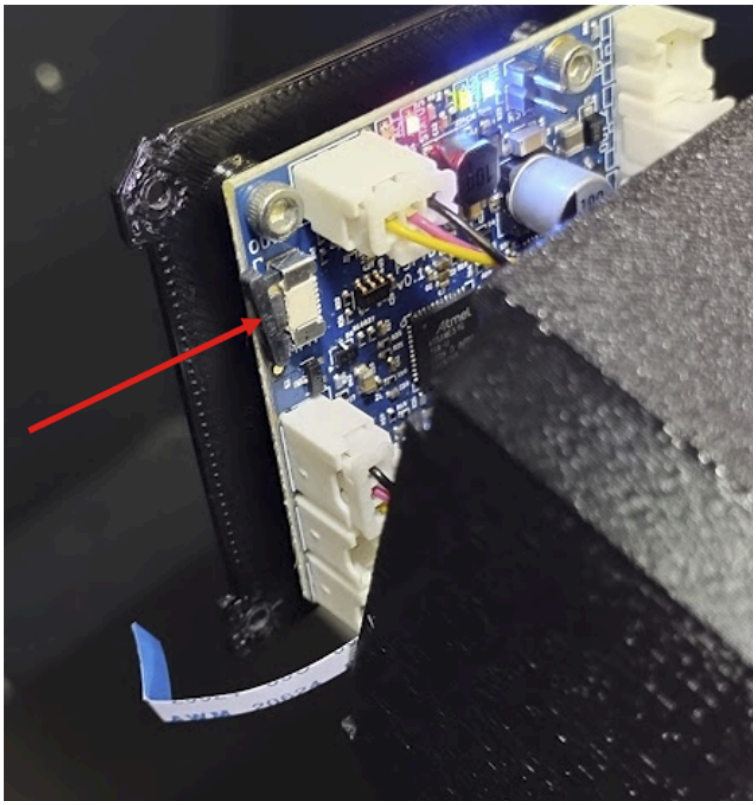
OPEN CONNECTOR

3. On the rear of the toolhead, remove the toolboard panel (4x M2 screws). Slide the toolboard back but leave all wires connected.



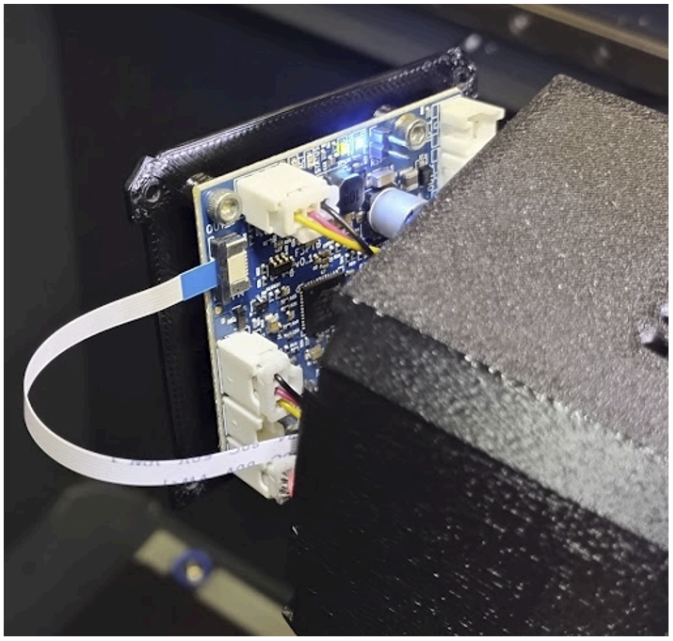


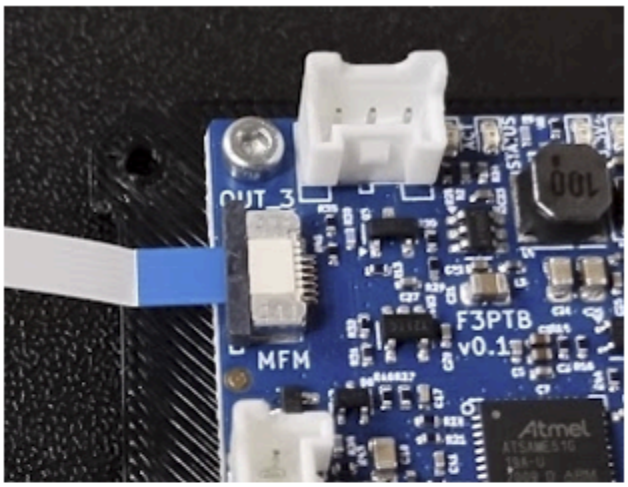
4. Use your black stick to open the other ZIF connector for the ribbon cable as shown.



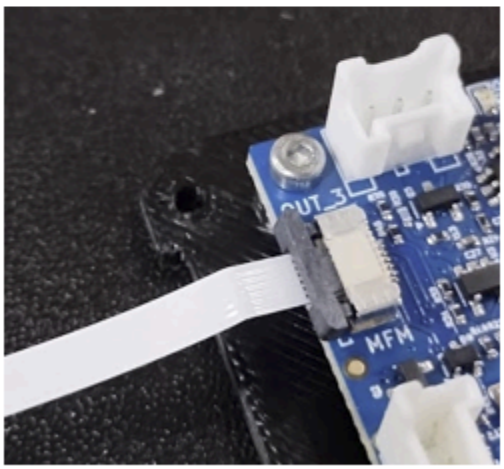
INSTALLATION

1. Install the toolboard end of the new ribbon cable into the connector on the toolboard.
    a. Make sure the wire is fully inserted
    b. Make sure the wire is squarely inserted
    c. Make sure the conductor/non-conductor side of the wire matches the picture.
2. Gently close the ZIF connector, use your black stick as needed.

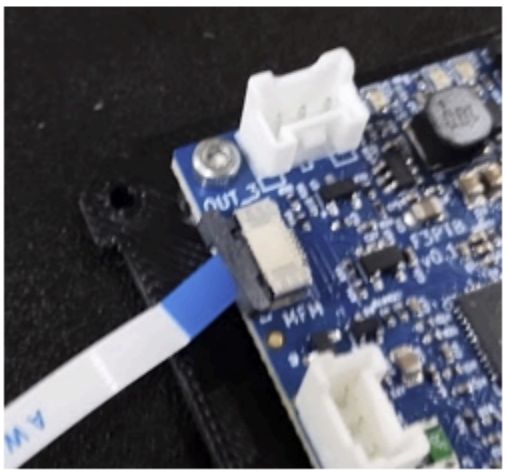




YES

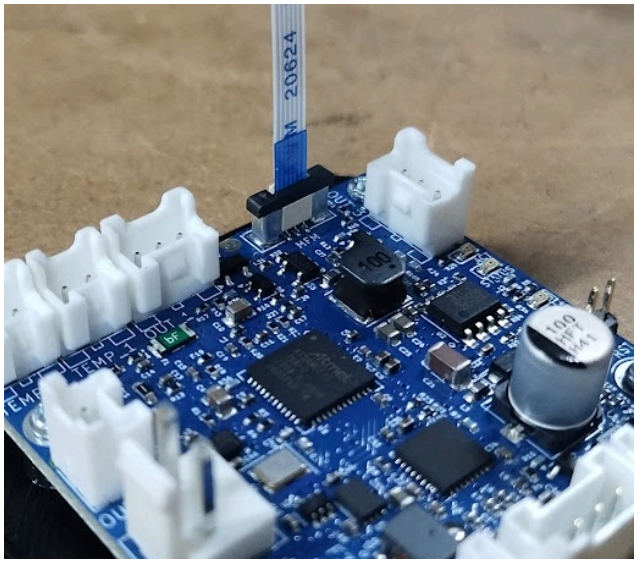


NO

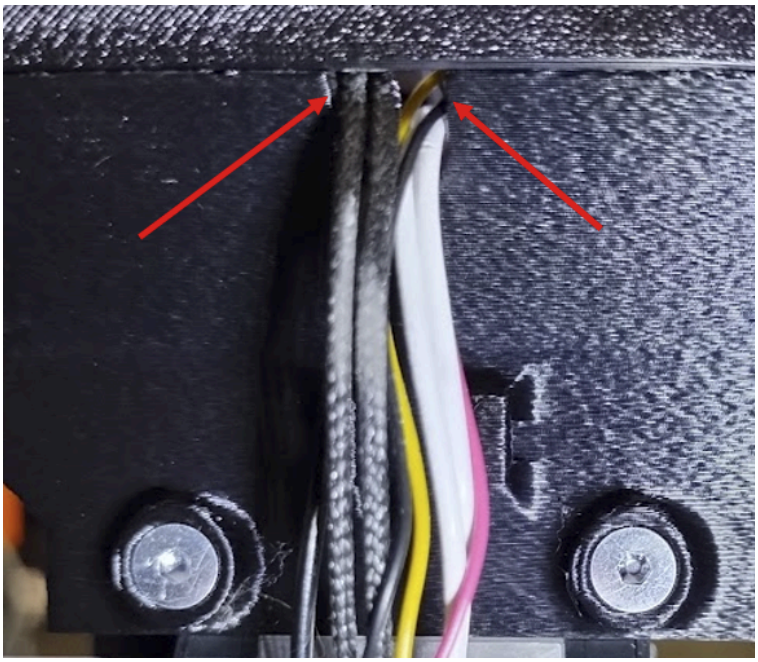


NO

NOTE: On printers with S/N F210139 and higher, your toolboard connector will be a right angle connector. The correct installation orientation of the cable is below:



3. Route the ribbon wire up the left side inside the toolhead until you can access it from the front.
4. **DO NOT CREASE, FOLD, OR EXCESSIVELY BEND** the wire or it will break and cause issues.
5. Reinstall the toolboard panel (4x M2 screws).
    a. Make sure all the wires that enter from the bottom **go through the hole and are not pinched.**

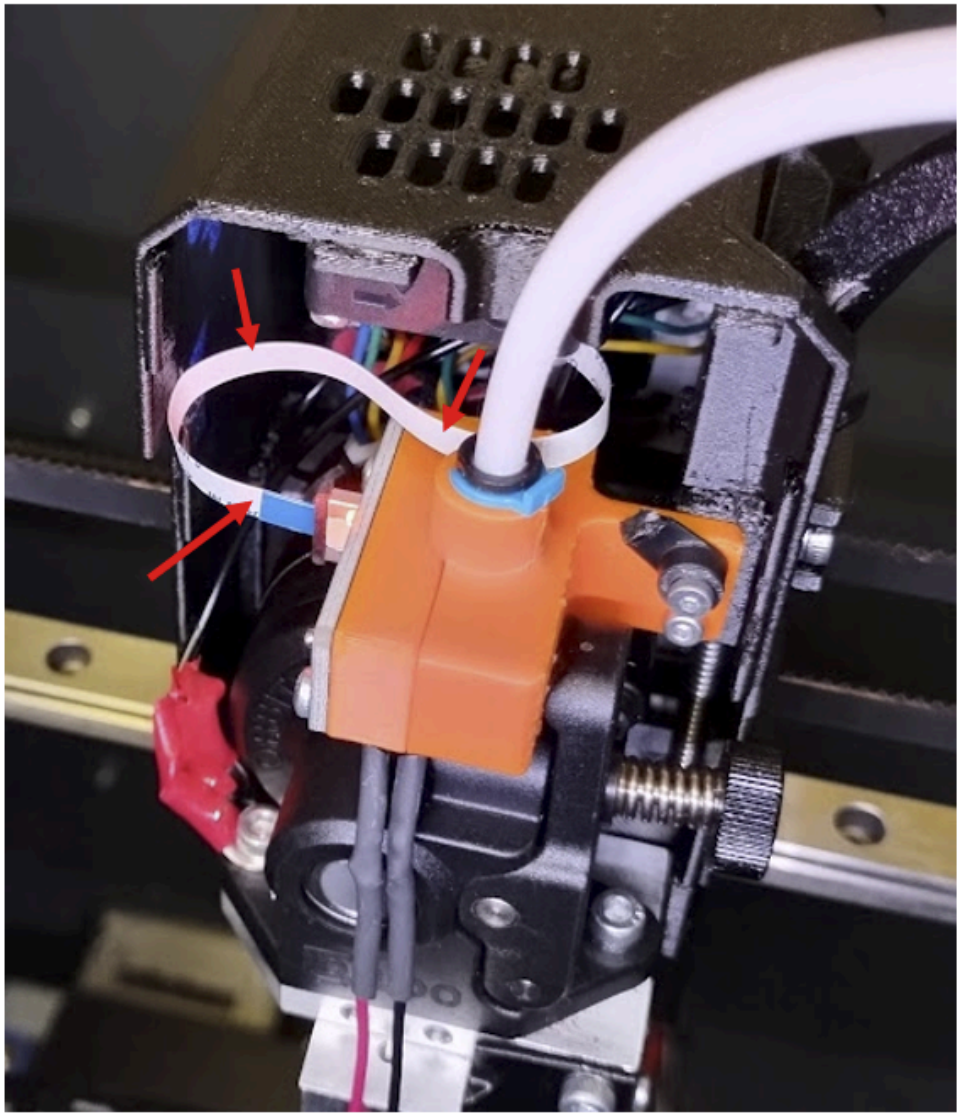


6. Install the front end of the ribbon wire into the filament monitor.
    a. Make sure the wire is fully inserted

b. Make sure the wire is squarely inserted

c. Make sure the conductor/non-conductor side of the wire matches the picture.

7. Gently close the ZIF connector, use your black stick as needed. Route the excess cable so it can't be pinched when you put the front housing on.



8. BEFORE reinstalling the front toolhead, power on and check for:

   a. Orange power LED on the filament monitor is lit

   b. After the printer boots, you don't see any error messages about the "filament monitor not found".

9. Reinstall the front toolhead.

TESTING

1. Load filament as normal.
2. Run a print.

STILL NEED HELP?

Contact our support team:

support@fusion3design.com

https://www.fusion3design.com/contact-support/

877-452-0010 x2